WHAT IS CLAIMED IS:

1. A vibration-isolating and sound-isolating system for a vehicle, having an engine and a vehicle body frame, said vehicle having a vehicle compartment, said system comprising:

an active vibration-isolating device supporting said engine on said vehicle body frame;

a first controller controlling said active vibration-isolating device so that vibration of the engine is inhibited from being transmitted to the vehicle body frame;

a speaker disposed within said vehicle compartment; and

a second controller controlling noise within said vehicle compartment by controlling sound from said speaker so that the noise is reduced.

2. The vibration-isolating and sound-isolating system of claim 1, further including a first sensor detecting a crank pulse from the engine, a second sensor detecting rotational speed of the engine, and a microphone disposed within said vehicle compartment, said active vibration-isolating device being controlled by said first controller based on the crank pulse signal from the engine and sound from said speaker being controlled based on the rotational speed of the engine and on the noise sensed by said microphone.

3. A vibration-isolating and sound-isolating system for a vehicle according to claim 1, wherein said active vibration-isolating device includes an engine-mounted portion mounted on

the engine, a frame-mounted portion mounted on the vehicle body frame, a first elastic member which connects the engine-mounted portion and the frame-mounted portion to each other, a liquid chamber which is defined at least partially by the first elastic member, a movable member facing the liquid chamber and reciprocally movable to change volume of the liquid chamber, an actuator adapted to generate a driving force for advancing the movable member, and a second elastic member adapted to generate a driving force for returning the movable member, the actuator being adapted to generate a driving force in an advancing direction even when the movable member is returned.

4. A vibration-isolating and sound-isolating system for a vehicle having an engine and a vehicle body frame, said vehicle having a vehicle compartment, said system comprising:

means for isolating vibration of said engine from said vehicle body frame;

first means for actively controlling said vibration isolating means so that vibration of the engine is inhibited from being transmitted to the vehicle body frame;

a speaker disposed within said vehicle compartment; and

second means for controlling noise within said vehicle compartment by controlling sound from said speaker so that the noise is reduced.